

Amendments in the Claims:

Please add new claims 21 and 22 as presented below. Upon the addition of claims 21 and 22, the status of the pending claims will be as follows:

Claims 1 and 2 (Canceled).

Claim 3 (Previously Presented): A radiation detection device comprising:

a light-receiving device array in which a plurality of light-receiving devices are one- or two-dimensionally arranged on a substrate to form a light-receiving portion, and a plurality of bonding pads are electrically coupled to said light-receiving devices in respective rows or columns of said light-receiving portion and disposed outside a periphery of said light-receiving portion to form a bonding pad portion;

a scintillator layer, deposited over at least a portion of said light-receiving devices, for converting radiation into light detectable by at least said portion of said light-receiving devices;

a radiation-transmittable, moisture-resistant protective film covering at least said scintillator and leaving at least said bonding pad portion of said light-receiving device array exposed; and

a coating resin located in proximity to a periphery of said moisture-resistant protective film, said periphery of said moisture-resistant protective film being fixed to said light-receiving device array with said coating resin.

Claim 4 (Previously Presented): A radiation detection device according to claim 3, wherein said coating resin includes a portion extending onto at least a portion of a surface of said moisture-resistant film opposite a surface of said moisture-resistant film facing said substrate.

Claim 5 (Previously Presented): A radiation detection device according to claim 3, wherein said coating resin comprises a first portion surrounding a periphery of said scintillator layer and being formed along an inner periphery of said bonding pad portion, and a second portion surrounding an outer periphery of said bonding pad portion, and wherein said bonding pads are formed between the first and second portions of said coating resin.

Claim 6 (Previously Presented): A radiation detection device according to claim 3, wherein said moisture-resistant protective film comprises a multilayer film.

Claim 7 (Previously Presented): A radiation detection device according to claim 6, wherein said multilayer film includes an inorganic layer.

Claim 8 (Previously Presented): A radiation detection device according to claim 3, wherein said scintillator layer comprises columnar crystals each having at least one side surface facing a side surface of another of the columnar crystals across a gap formed between the side

surfaces of the columnar crystals, said moisture-resistant protective film extending at least partially into the gaps formed between the side surfaces of the columnar crystals of said scintillator layer.

Claim 9 (Previously Presented): A radiation detection device comprising:

a light-receiving device array in which a plurality of light-receiving devices are one- or two-dimensionally arranged on a substrate to form a light-receiving portion, and a plurality of bonding pads are electrically coupled to said light-receiving devices in respective rows or columns of said light-receiving portion and disposed outside a periphery of said light-receiving portion to form a bonding pad portion;

a scintillator layer, deposited over at least a portion of said light-receiving devices, for converting radiation into light detectable by at least said portion of said light-receiving devices;

a frame, comprising resin, surrounding at least one of a periphery of said scintillator layer or an outer periphery of said bonding pad portion; and

a radiation-transmittable, moisture-resistant protective film covering at least said scintillator and leaving at least said bonding pad portion of said light-receiving device array exposed, wherein a periphery of said moisture-resistant protective film is fixed to said light-receiving device array with said resin frame.

Claim 10 (Previously Presented): A radiation detection device according to claim 9, wherein said resin frame includes a portion extending onto at least a portion of a surface of said moisture-resistant film opposite a surface of said moisture-resistant film facing said substrate.

Claim 11 (Previously Presented): A radiation detection device according to claim 9, wherein said resin frame comprises a first portion surrounding a periphery of said scintillator layer and being formed along an inner periphery of said bonding pad portion, and a second portion surrounding an outer periphery of said bonding pad portion, and wherein said bonding pads are formed between the first and second portions of said resin frame.

Claim 12 (Previously Presented): A radiation detection device according to claim 9, wherein said moisture-resistant protective film comprises a multilayer film.

Claim 13 (Previously Presented): A radiation detection device according to claim 12, wherein said multilayer film includes an inorganic layer.

Claim 14 (Previously Presented): A radiation detection device according to claim 9, wherein said scintillator layer comprises columnar crystals each having at least one side surface facing a side surface of another of the columnar crystals across a gap formed between the side surfaces of the columnar crystals, said moisture-resistant protective film extending at least partially into the gaps formed between the side surfaces of the columnar crystals of said scintillator layer.

Claim 15 (Previously Presented): A radiation detection device comprising:

a light-receiving device array in which a plurality of light-receiving devices are one- or two-dimensionally arranged on a substrate to form a light-receiving portion, and a plurality of bonding pads are electrically coupled to said light-receiving devices in respective rows or columns of said light-receiving portion and disposed outside at least a part of a periphery of said light-receiving portion to form a bonding pad portion;

a scintillator layer, deposited over at least a portion of said light-receiving devices, for converting radiation into light detectable by at least said portion of said light-receiving devices;

a frame, comprising resin, surrounding at least a part of a periphery of said scintillator layer or a part of an outer periphery of said bonding pad portion; and

a radiation-transmittable, moisture-resistant protective film covering at least said scintillator and leaving at least said bonding pad portion of said light-receiving device array exposed, wherein at least a part of a periphery of said moisture-resistant protective film is fixed to said light-receiving device array with said resin frame.

Claim 16 (Previously Presented): A radiation detection device according to claim 15, wherein said resin frame includes a portion extending onto at least a portion of a surface of said moisture-resistant film opposite a surface of said moisture-resistant film facing said substrate.

Claim 17 (Previously Presented): A radiation detection device according to claim 15, wherein said resin frame comprises a first portion surrounding a periphery of said scintillator layer and being formed along an inner periphery of said bonding pad portion, and a second portion surrounding an outer periphery of said bonding pad portion, and wherein said bonding pads are formed between the first and second portions of said coating resin.

Claim 18 (Previously Presented): A radiation detection device according to claim 15, wherein said moisture-resistant protective film comprises a multilayer film.

Claim 19 (Previously Presented): A radiation detection device according to claim 18, wherein said multilayer film includes an inorganic layer.

Claim 20 (Previously Presented): A radiation detection device according to claim 15, wherein said scintillator layer comprises columnar crystals each having at least one side surface facing a side surface of another of the columnar crystals across a gap formed between the side surfaces of the columnar crystals, said moisture-resistant protective film extending at least partially into the gaps formed between the side surfaces of the columnar crystals of said scintillator layer.

Claim 21 (New): A radiation detection device comprising:

a light-receiving device array in which a plurality of light-receiving devices are one- or two-dimensionally arranged on a substrate to form a light-receiving portion, and a plurality of bonding pads are electrically coupled to said light-receiving devices in respective rows or columns of said light-receiving portion and disposed outside a periphery of said light-receiving portion to form a bonding pad portion;

a scintillator layer, deposited over at least a portion of said light-receiving devices, for converting radiation into light detectable by at least said portion of said light-receiving devices;

a radiation-transmittable, moisture-resistant protective film covering at least a portion of said scintillator and leaving at least said bonding pad portion of said light-receiving device array exposed; and

a coating resin located in proximity to a periphery of said moisture-resistant protective film, said periphery of said moisture-resistant protective film abutting said coating resin.

Claim 22 (New): A radiation detection device comprising:

a light-receiving device array in which a plurality of light-receiving devices are one- or two-dimensionally arranged on a substrate to form a light-receiving portion, and a plurality of bonding pads are electrically coupled to said light-receiving devices in respective rows or columns of said light-receiving portion and disposed outside a periphery of said light-

receiving portion to form a bonding pad portion;

a scintillator layer, deposited over at least a portion of said light-receiving devices, for converting radiation into light detectable by at least said portion of said light-receiving devices;

a radiation-transmittable, moisture-resistant protective film covering at least a portion of said scintillator and leaving at least said bonding pad portion of said light-receiving device array exposed; and

a coating resin located in proximity to a periphery of said moisture-resistant protective film.